REMARKS

The above-noted amendments to the claims including the amendments to claims 29, 40, and 51, are respectfully submitted in response to the official action dated December 23, 2009.

The requirement that the clamping portion be manufactured to include an elongated slit having a predetermined profile is specifically disclosed in the specification at various locations, including ¶¶ [0030], [0054], and [0067], and the requirement for the contour of the elongated slit having the three required predetermined dimensions is specifically set forth in the specification, including in the Figures, such as Figures 1a-c. It is therefore respectfully submitted that no new matter is included in these amendments, and their entry is therefore respectfully solicited.

In responding to applicants' prior response, the Examiner points out that applicants' arguments are manifold and span 16 pages, but nevertheless asserts that he will do his best to respond to all of these arguments. Applicants apologize for any inconvenience presented by the length of their response, but can only note that the official action dated June 22, 2009, included 15 pages of arguments with multiple variations of each such argument, and as the Examiner is well aware, applicants must respond to every argument presented in order to be complete. Furthermore, since the latest official action in this case now spans some 21 pages, it will be difficult for applicants to limit their response, but they will do their best to do so in as simple a manner as possible.

In order to attempt to expedite the Examiner's consideration of this response and to appreciate the patentable nature of the amended claims in this case, applicants will therefore initially discuss the nature of these amended claims and how they specifically define over the prior art. In

particular, emphasis will be placed on the primary Weeks reference 20 heavily relied upon by the Examiner.

One of the principal distinctions between Weeks and the present invention relates to the very nature of Weeks, and that patentee's use of a specific deforming process to crimp his doctor blade with a connecting element (19). The Examiner has initially agreed with applicants that the claimed structure, even with respect to the claims prior to the latest amendments, being narrower at the front and wider at the back, is not arrived at in Weeks until after his crimping step. The Examiner, however, then goes on to contend that there is nothing in the claims which prevents Weeks, even after his crimping step is carried out, from nevertheless anticipating or rendering obvious the claimed invention. As pointed out by applicants, Weeks clearly requires a system in which the coupling member 19 is assembled with the blade sections 17 and 18 by use of a compression jig, as shown in Figure 2. In this manner, it is critical to the invention of Weeks that the walls 22 and 27 of the coupling member 19 be deformed downwardly, causing the slotted recesses 20 and 25 to be "permanently deformed into a somewhat trapezoidal configuration, compressing and deforming the resilient stripes and tightly and permanently gripping the respective blade sections 17, 18." (Col.5 ll.60-15.)

In contrast to Weeks, such a detailed process is entirely unnecessary with the present invention. Turning to the presently amended claims, it now becomes clear that Weeks' product is now excluded from these claims, which require that the clamping portion of the present invention, in the form in which it is produced or manufactured (*e.g.*, extruded) is provided with a predetermined profile, which profile permits that the doctor blade and the elastic clamping members can be both slidably inserted into the elongated slit and removed from that slit for replacement, repair, cleaning, etc. Contrary to

the Examiner's prior contentions, the amended claims in this application now do specifically include language which is dispositive of Weeks' either anticipating or rendering the present invention obvious. These amended claims exclude the critical crimping step of Weeks, since Weeks' original, manufactured coupling member does not retain its original profile when the doctor blade is mounted therein, but it is necessarily deformed into an entirely different profile. Indeed, this deformation step is so critical to the Weeks invention that it is included in the claims in that application (*see*, for example, claim 3 (b) and (c), claim 4 (c), claim 5 (b), and claim 9 (b).

In accordance with the present invention, the extruded metal profile of the clamping portion includes an elongated slit having a profile which is dimensioned so that the doctor blade and the clamping member (applicants' elastomeric member shaped as a wedge strip 3) can fit precisely therein. There is no need to deform or at all alter the original predetermined profile of the claimed clamping portion hereof. Thus, by utilizing the presently claimed invention, not only is the claimed doctor blade mounting system readily produced, but it is also now possible to readily remove the doctor blade therefrom for cleaning or other purposes. It is only by means of the present invention that the wedge strip can be inserted into the wedge-shaped slit and retain the blade in position for operation, while at the same time remaining readily removable therefrom.

The claims also now specifically require the particular profile for the elongated slit in the clamping portion which is specifically shown in the drawings. This includes a generally decreasing cross-sectional dimension except for the slightly constricted portion in the outer end of the clamping portion. As can thus be seen in the drawings, the

inner portion includes a narrow cross-section which is indeed narrower than the dimensions anywhere else along the profile. This can again be contrasted to Weeks, where after his required deformation, the deformed ends constrict the blade and inserts 31 and 32 at the outer end of the slit so that the inner end now has a greater dimension than the outer end thereof. It is thus clear that Weeks cannot possibly disclose a contour as now required by the claims herein. Furthermore, while the deformed outer end of the coupling member 19 in Weeks compresses the wedge, even the small constriction at the outer end of applicants' device is merely intended to prevent the clamping member from leaving the elongated strip, but it is the overall configuration, including the narrow inner portion, which compresses the wedge strip and provides a clamping force against the doctor blade.

There are yet other distinct advantages realizable by utilizing the present invention, particularly as compared to prior art such as Weeks. For example, by using the as-manufactured extruded profile, which can, for example, comprise extruded aluminum as the clamping portion, one obtains extremely small variations in the dimensions along the entire length of the profile, and thus provides an essentially linear product. This, in turn, is extremely important in maintaining an even pressure along the entire length of the doctor blade, and for printing purposes this is essential. On the other hand, this is clearly not obtainable with Weeks. The precision in the product produced by Weeks would be dramatically deteriorated by the machining or deformation required thereby.

It is therefore only by using the present invention that a clamping system can be obtained which is not only extremely compact and robust, but which is liquid-tight, easily inspectable, easily accessible for cleaning, and practically

impossible to wear out. None of this is achievable with the Weeks product.

In response to applicants' contention that the clamping member 31 is not removable from the slit 20 in Weeks and that the doctor blades are permanently clamped in their openings, rendering it virtually impossible for the elastomeric strips to be dismountable therefrom, the Examiner contends that this is not the case. The Examiner first contends that both Weeks and the presently claimed invention provide a slot which is wider at the back than in the front. The amended claims now clarify the fact that the inner dimension of the clamping portion of the present invention has a dimension which is smaller than that of the dimensions along the profile thereof; *i.e.*, at the outer and intermediate portions thereof. Secondly, the Examiner contends that in both cases the doctor blade installation is presumably "permanent," such that the doctor blade, by definition, must be firmly secured in order to operate effectively. It is thus contended that applicants are merely arguing that the geometry of the claimed invention results in less force being required to remove the doctor blade and damper than in the case of Weeks. It is then contended, however, that there are no claim limitations directed to the amount of force required to do so. However, it is first noted that there is a clear difference in geometry between what is shown in Weeks, including a narrowest outer end and a widest inner end, and what is shown in the present application and now set forth in the claims, requiring the narrowest inner end compared to any dimension along the entire profile including the outer end. Secondly, the Examiner's definition of the term "permanent" is not even in accord with the normal meaning of that word. Applicants' claimed invention, while certainly providing sufficient pressure to hold the doctor blade in place during use, is not "permanent" in that it is easily removable and

replaceable. On the other hand, one need only read Weeks itself to determine that compression and deformation are intended to "tightly and permanently" grip the blade therein. After going through the effort to deform the edges of the connecting element 19 so that it can permanently grip the end of the doctor blade, it is unreasonable to presume that this is anything but a permanent and non-replaceable result, and that it differs in kind, rather that by slight degrees, from the presently claimed invention.

With respect to the rejection of claim 52, applicants had previously argued that there would be no reason why lubrication would be employed in Weeks. In response, the Examiner has taken the position that the blade and damper of Weeks are quite long and fit tightly within the slot in the blade holder and that therefore lubrication would surely assist in reducing friction in installing them in the slot. However, it is clear that one of ordinary skill in this art would not believe that lubrication would be of any use in connection with Weeks. In the context of the present invention, the profile of the elongated slit is predetermined to the extent that it is produced to include carefully selected dimensions in order for the blade and clamping members to fit precisely therein. There is thus a clear reason to employ lubrication to assist in that tight-fitting entry, and to assist in subsequent removal of the clamping member and the doctor blades thereby. On the other hand, in the environment of Weeks, an initial slot is produced which is far too large to effect that result. There is thus no need whatsoever for lubrication to be used upon insertion of the blade and inserts prior to deformation, since there is no tight fit contemplated at that point. That fit is only obtained after subsequent deformation, and since according to Weeks, after such deformation retention of the doctor blade is considered to be "permanent" and there is no intention to remove same, there is a

further disincentive to include any lubricant therein. Either the coupling portion is shaped such that the clamping member is dismountable and re-mountable by means of lubrication, as in the present invention, or the slit is deformed after installation of the blade, and during such deformation a permanent compression is obtained without any need for lubrication, as in Weeks. These results are mutually exclusive, and not interchangeable.

In accordance with the present invention, it is therefore possible to design a product (clamping portion) having a predetermined profile which is specifically dimensioned for a particular doctor blade and clamping member arrangement therein, and so that a particular desired pre-stress is created with sufficient force for the purposes of this invention. On the other hand, using deformation as in Weeks, not only would there be significant variations in clamping along the entire length of the clamping member, but a much higher pre-stress, probably at least two or three times greater than that which is really necessary, would be created. All of the above is believed to provide more than adequate basis for the immediate allowance of all of the claims in this application, and such action is therefore respectfully solicited.

To be complete, applicants would note that claims 29-33, 35-49, 50, 55, 56, and 58 have been rejected as being anticipated by Weeks under 35 U.S.C. § 102(b). In addition, claim 50 has been rejected as being unpatentable over Böös*e et al*. in view of Weeks under 35 U.S.C. § 103(a); claims 52 and 53 have been rejected as being unpatentable over Weeks under 35 U.S.C. § 193(a); claim 54 has been rejected as being unpatentable over Weeks in view of Böös*e* under 35 U.S.C. § 103(a); claim 57 has been rejected as being unpatentable over Weeks in view of Van Denend under 35 U.S.C. § 103(a); and claim 59 has been rejected as being unpatentable over Weeks in view of Perez under

35 U.S.C. § 103(a). Applicants would therefore merely repeat all of the prior analysis of each of these rejections as was set forth on pages 10-24 of applicants' prior response. In each case, applicants have traversed these rejections for at least those prior reasons, and for the additional reasons set forth above. Applicants will further limit their latest response to these rejections by additionally responding only to specific arguments now presented by the Examiner in connection with these rejections.

Firstly, with respect to claims 31 and 42, the Examiner contends that Weeks teaches a mounting system in which the clamping means fixes the doctor blade by means of friction, stating that "it appears that blade 17 and clamping means 31 create friction when inserted into slot 20, Fig. 2." As suggested above, however, this is clearly not the case. When the doctor blade and the clamping means are inserted into the slot 20 (*i.e.*, prior to deformation), there is no friction at all which needs to be overcome, or certainly not friction of any significant degree. It is only after deformation that sufficient friction exists in order to affix the clamping means and doctor blade in place. Indeed, since Weeks does not even mention the use of lubrication, it is doubly clear that it is the actual deformation of the slot onto the blade in Weeks that provides sufficient clamping force in order to hold the blade together with the elastomeric strip thereof.

With respect to claims 36 and 47, the Examiner contends that Weeks teaches that the elastomeric member is in the form of a wedge strip having a shape cooperating with the contoured surface of the first side of the elongated slit by stating that "member 31 appears to fit and lock in slit 20, and to cooperate with said contoured surface of said first side, Fig. 2." Once again, however, and particularly referring to the amended claims herein, the clamping member 3 of the present invention in fact has a reverse wedge shape as compared to that of Weeks, as is discussed in detail above. Furthermore, the strip in the present invention is initially wedge shaped in

accordance with the predetermined profile therein, while in Weeks the shape is only created after deformation.

Referring to claim 45, the Examiner contends that Weeks does teach that the clamping means is removably disposed within the slit, stating that "31 is removable from slit 20, Fig. 2." Applicants have reiterated on a number of occasions the fact that this is clearly not the case, and that quite to the contrary Weeks specifically teaches a permanent deformation, which does not allow for removability, and certainly not in the manner of the present invention. It is thus not understood where in Weeks the Examiner believes there is a disclosure of the doctor blade mounting system of claim 40, much less that of claim 45, in which the clamping means is specifically required to be removably disposed within the predetermined profile of the slit.

With respect to claim 51, among other things, the Examiner claims that Weeks discloses this method including the requirements for the claimed dimensions of the elongated slit, stating that "[t]he deformation of the material occurs to a greater extent toward the outer extremities of the respective walls. This causes the slotted recesses 20, 25, to be permanently deformed into a somewhat trapezoidal configuration." (Col.5 ll. 59-63.) The actual quote from Weeks, however, reads as follows:

> The displacement of the material occurs to a greater extent toward the outer extremities of the respective walls. This causes the slotted recesses 20, 25 to be permanently deformed to a somewhat trapezoidal configuration, compressing and deforming the resilient stripes and tightly and permanently gripping the respective blade portions 17, 18.

Again, Weeks clearly relates to a fixed irremovable joint being created. This is the entire thrust of the invention disclosed in Weeks. The Examiner's attempt to avoid this conclusion by quoting portions of Weeks out of context cannot be considered to be appropriate, or to constitute a fair reading of that disclosure. The contrast between the easily removable clamping joint produced in accordance with the presently claimed invention and the fixed clamping joint desired and obtained by

Weeks could not be greater. This same quotation is referred to in reference to the rejection by the Examiner of claim 50.

It is therefore submitted that in view of the reiteration of all of the arguments previously presented in response to the prior office action in this case, along with the amendments set forth above and the detailed discussion herein of the specific differences and distinctions between the presently claimed invention and the prior art including Weeks, it is respectfully submitted that all of the claims in this application now clearly do possess the requisite novelty, utility and unobviousness to warrant their immediate allowance, which action is therefore respectfully solicited.

If, however, for any reason the Examiner still does not believe that such action can be taken at this time, it is respectfully requested that he telephone applicants' attorney at (908) 654-5000 in order to overcome any further objections thereto.

Finally, if there are any additional charges in connection with this requested amendment, the Examiner is authorized to charge Deposit Account No. 12-1095 therefor.

Dated: June 21, 2010

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